

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS FO Box 1430 Alexandra, Virginia 22313-1450 www.tepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,319	03/29/2002	Wilhelm Aures		7284
29177 BELL. BOYD	7590 06/18/200 & LLOYD, LLP	8	EXAMINER	
P.O. BOX 1135			SEFCHECK, GREGORY B	
CHICAGO, IL 60690			ART UNIT	PAPER NUMBER
			2619	
			MAIL DATE	DELIVERY MODE
			06/18/2008	PAPER

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/089,319 Filing Date: March 29, 2002 Appellant(s): AURES ET AL.

> Kevin R. Spivak For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4/14/2008 appealing from the Office action mailed 10/18/2007.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,323,444	ERTZ ET AL	6-1994
6.038,214	SHIONOZAKI	3-2000

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

Claims 1, 2, 6-14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ertz et al. (US005323444A), hereafter Ertz, in view of Shionozaki (US006038214A).

- Regarding Claims 1 and 5,

Ertz teaches a method for controlling instances of access to transmission resources of a communications network for transferring information items (Fig. 1, Abstract lines 1-18) referenced by the control of a call to a Public Safety Answering Point based on it's call capacity before the call is routed, comprising checking an event of an instance of access to the communications network to determine if the amount of transmission resources required for the information transfer is currently available in the communications network (Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30) referenced by the determination if the PSAP of the network is at Call Capacity before routing the call to the PSAP, determining the priority of the instance of access upon ascertaining an amount of currently available transmission resources insufficient for the information transfer (Fig. 19(a), col. 10 lines 45-67, claim 38 lines 1-28, Fig. 20) referenced by the initial destination lookup from an Emergency Service Number table based on ANI step 3 and an emergency call to a PSAP being a preferred priority with alternate routing applied Step 109 in the event PSAP is at capacity, and allocating the transmission resources required for the information transfer made in the communications network in the event of a high priority of the instance of access (Fig. 62,

col. 103 lines 17-67, col. 104 lines 1-16) referenced by the determination the PSAP is at Call Capacity and Routing Fails step 12 and Get Alternative step 13 is performed.

Ertz teaches further comprising determining at lest one of the priority of the instance of access is using destination information items transferred in the course of the current instance of access (Fig. 10, Fig. 19(a), col. 10 lines 45-67) referenced by the incoming call processed through a check destination facility 630 wherein the ANI is used to determine a priority call from the Emergency Service Number table step 3, and of information items transferred in the course of the current instance of access and representing the type of information items to be transferred (Fig. 19(a), col. 10 lines 45-67, Fig. 20) referenced by the ANI being an emergency type of information from the ESN table search of step 3 to determine an available PSAP, and the priority of the allocated transmission resources by the type of information items transferred (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the Check Destination 100 for preferred priority calls to PSAP 103 or non priority PSTN Destination Number 101.

Ertz teaches wherein instances of access to the communications network for transferring information items with destination information items identifying an emergency call center have a high priority (col. 3 lines 63-66, Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the Check Destination 100 for preferred priority calls to Public Safety Access Point 103 which is an emergency call center for E9-1-1 calls, the information items to be transferred to the emergency call center being assigned a high priority (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the preferred priority of calls to PSAP.

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Ertz does not teach for the information transfer are released or made available or corresponding transmission resources allocated for the transfer of information items assigned a low priority are released or made available.

Shionozaki discloses a method and apparatus that enables reallocation of resources from low priority sessions to meet he demand of a higher priority session (Abstract; Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ertz by enabling the allocation of resources for the required information transfer by freeing resources of existing, lower priority sessions, as taught by Shionozaki. This would maximize the available resources of a network while accommodating the highest priority sessions.

- Regarding Claim 2,

Ertz teaches wherein the transmission resources made available are allocated for the information transfer (Fig. 19(a), col. 10 lines 45-67) referenced by the Route Call step 23 followed by Routing is Successful step 24 wherein the transmission resources for the call is allocated.

- Regarding Claim 6,

Ertz teaches wherein the required transmission resources are determined and made available randomly (Fig. 63, col. 105 lines 19-26) referenced by the acceptance by the PSAP of another call step 17 without limitation on a particular trunk line.

- Regarding Claim 7,

Ertz teaches wherein the transmission resources made available are allocated to the instances of access having a high priority (Fig. 1, col. 8 lines 30-66, claim 38 lines 6) referenced by the subscriber being an Emergency Service Requestor initiates an E9-1-1 call 201 which are preferred priority calls checked against an Emergency Service Number table 213 for routing to a PSAP, for the information transfer the allocated transmission resources being assigned a high priority (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the preferred priority of calls to PSAP routed to an available PSAP destination step 103.

- Regarding Claim 8,

Ertz teaches wherein the transmission resources are arranged between switching devices arranged in the communications network (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the Public Telephone Network 219 and the Call Routing Switch 218 of Platform 204, and/or between a switching device of the communications network and at least one front-end device arranged in the subscriber access area of the switching device (Fig. 2, col. 10 lines 8-29, lines 45-67) referenced by the Call Routing Switch 218 and the Applications Processor 234 which is a front end for searching the TN/ESN table 213 using a combination of NPD and ANI information which is accessible through Workstation 212.

- Regarding Claims 9 and 10,

Ertz does not explicitly disclose forming and storing an identifier for the corresponding front-end device in the switching device when the transmission resources required are available, where the identifier indicates a reduced amount of resources for the transmission of information items having a low priority. Ertz also does not explicitly discloses erasing or resetting the identifier upon expiration of a prescribed time interval in which the reduced amount of resources allocated for information items having a low priority is not exceeded.

Shionozaki discloses that the states (identifier) of sessions having resources allocated to it are stored and then changed to reflect a preemption or change of low priority sessions to accommodate higher priority sessions. Shionozaki further shows that the states are returned to their original states after a predetermined time has elapsed (Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ertz by storing the states of resource-allocated sessions, updating those states to reflect a reduction in resource allocation for preempted/changed low priority sessions to accommodate higher priority sessions and resetting the states after a predetermined time has elapsed, as shown by Shionozaki. This would maximize the available resources of a network in accommodating the highest priority sessions while enabling the network to keep track of which low priority sessions have surrendered resources to higher priority sessions such that the resources could be re-allocated back to the low priority session after the higher priority session is completed.

- Regarding Claim 11,

Ertz teaches wherein the transmission resources are implemented by a prescribed number of trunks or by a prescribed number of time-division-multiplexoriented transmission channels (Fig. 1, col. 8 lines 58-66) referenced by the incoming Emergency Service trunk 206 from the Public Telephone Network 219 which are inherently time division multiplexed.

- Regarding Claim 12,

Ertz teaches a communications system for controlling instances of access to transmission resources of a communications network (Fig. 1, Abstract lines 1-18) referenced by the control of a call to a Public Safety Answering Point based on it's call capacity before the call is routed, comprising at least one switching device arranged in the communications network (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the Platform 204 with Call Routing Switch 218, transmission resources assigned to the at least one switching device and allocated for transmitting information items (Fig. 1, col. 8 lines 30-43) referenced by the incoming/outgoing trunks 206 of the Call. Routing Switch 218, and a device provided in the event of an instance of access to the transmission resources to check the current availability of the transmission resources required for the information transfer (Fig.1, Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30) referenced by the Application Processor 234 determination if the PSAP of the network is at Call Capacity before routing the call to the PSAP, a determining device to determine the priority of the instance of access upon ascertaining an amount of currently available transmission

resources insufficient for the information transfer are arranged in the at least one switching device (Fig. 1, Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30, Fig. 20) referenced by the preferred priority of calls to PSAP and the Platform 204 determination if the PSAP is at call capacity and cannot accept any more calls step 18 through the associated trunks of the call routing switch 218 resulting in Use Alternate Routing Step 109, and the event of a determined high priority of the instance of access are provided in the at least one switching device and the transmission resources required for the information transfer are made available (Fig. 19(a), col. 10 lines 45-67, col. 11 lines 1-15, claim 38 lines 1-28) referenced by the initial destination lookup from an Emergency Service Number table based on ANI step 3 and Get Alternative step 13 if the PSAP is at capacity to obtain alternate transmission resources with the emergency call to PSAP being preferred priority.

Ertz further teaches wherein the determining device to determine the priority of the instance of access are configured such that the priority is determined with at least one of destination information items transferred in the course of the current instance of access (Fig. 1, col. 10 lines 45-61, Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the Platform 204 performing a Check Destination 100 for preferred priority calls to PSAP 103 or non priority PSTN Destination Number 101 wherein the preferred priority call is based on emergency 9-1-1 digits of the current call and the ANI identifier, and with information items transferred in the course of the current instance of access and representing the type of the information items to be transferred (col. 10 lines 45-61) referenced by the emergency 9-1-1 digits and the ANI of the current call representing a preferred priority, the priority of the allocated transmission resources being determined

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during the information transfer by the type of transferred information items (Fig. 1, col. 10 lines 45-61, Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the Platform 204 performing a Check Destination 100 for preferred priority calls to PSAP 103 or non priority PSTN Destination Number 101 wherein the preferred priority call is based on emergency 9-1-1 digits of the current call and the ANI identifier.

Ertz does not teach for the information transfer are released or made available or corresponding transmission resources allocated for the transfer of information items assigned a low priority are released or made available.

Shionozaki discloses a method and apparatus that enables reallocation of resources from low priority sessions to meet he demand of a higher priority session (Abstract; Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ertz by enabling the allocation of resources for the required information transfer by freeing resources of existing, lower priority sessions, as taught by Shionozaki.

This would maximize the available resources of a network while accommodating the highest priority sessions.

- Regarding Claim 13,

Ertz teaches wherein the device for rendering available the required transmission resources is configured such that the transmission resources made available are allocated to the instance of access for the information transfer (Fig. 1, Fig. 63, col. 105 lines 19-26) referenced by the Platform 204 determination that the destination PSAP is not at capacity and can accept another call step 17 wherein the call is routed to the PSAP.

- Regarding Claim 14,

Ertz teaches wherein the allocated transmission resources assigned to the at least one switching device are arranged between at least one of the at least one switching device and at least one further switching device (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the Public Telephone Network 219 which inherently is composed of telephone switching devices and the Call Routing Switch 218 of Platform 204, and are arranged between the at least one switching device and at least one front-end device arranged in the subscriber access area of the switching device (Fig. 2, col. 10 lines 8-29, lines 45-67) referenced by the Call Routing Switch 218 and the Applications Processor 234 which is a front end for searching the TN/ESN table 213 using a combination of NPD and ANI information which is accessible through Workstation 212.

- Regarding Claim 17,

Ertz teaches wherein the transmission resources assigned to the switching device are implemented by trunks outgoing from the at least one switching device or by outgoing time-division-multiplex-oriented transmission channels (Fig. 1, col. 8 lines 58-66) referenced by the Emergency Service trunk 206 to/from the Call Routing Switch 218 from the Public Telephone Network 219 and the outgoing trunks to the Public Telephone Network 219 for termination to the PSAP all of which are inherently time division multiplexed lines.

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(10) Response to Argument

Appellant's Arguments on pages 13-15 of the Brief filed 4/14/2008 have been fully considered but they are not persuasive.

- On pgs. 13-14 of the Brief, Appellant alleges that Ertz does not disclose
 "determining the priority of a call using destination information items
 transferred in the course of the call", as recited in the independent claims.
 Applicant contends Ertz' disclosure pertains only to emergency calls all
 having the same priority and that Ertz does not address competition for
 communications resources with non-emergency calls.
- The Examiner respectfully disagrees. The background of Ertz (column 1) clearly illustrates that emergency call equipment is provided for within the PSTN, which is divided into service areas containing 150,000 subscribers, where each subscriber is assigned to a particular ESN such that a 911 call received by a specific End Office (EO) on a particular subscriber line can be routed accordingly. In light of this background, it is clear that Ertz disclosure of emergency calls is from within the larger, more general PSTN, in which subscribers communicate via non-emergency calls. The cited disclosures from Ertz regarding initial destination lookup of ESN table for a 911 call meet the contested limitations, since these disclosed actions in Ertz require recognition of the call as an emergency call (as opposed to the non-emergency calls typically being placed

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between subscribers on the PSTN). Given the broad claim language, the

rejections based upon these cited disclosures from Ertz are proper.

- On pg. 14-15 of the Brief, Appellant also argues that the combination of

Ertz and Shionozaki is improper because Ertz only deals with emergency

calls, such that any pre-emption of calls based on priority from Shionozaki

would have the undesirable result of dropping emergency calls when

combined with Ertz.

- The Examiner respectfully disagrees. As shown above, Ertz' disclosure is

illustrates that emergency calls are placed amongst non-emergency calls

in the PSTN. Therefore, combining the priority-based preemption

teachings of Shionozaki with Ertz is proper in rejecting the claims.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Gregory B Sefcheck/ Examiner, Art Unit 2619

6-10-2008

/Wing F. Chan/

Supervisory Patent Examiner, Art Unit 2619

6/16/08

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